Veri-Q

CE 0120

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Rev.1 201111

Veri-Q

Blood Glucose Monitoring System MGD-1001

Owner's Booklet

MiCoBioMed

Welcome

Thank you for selecting the Veri-Q MGD-1001 Blood Glucose Monitoring System. Follow the steps for using the system in this manual. Before using your monitoring system for the first time, please read this manual carefully.

Intended use

This Veri-Q MGD-1001 Blood Glucose Monitoring System is intended for the quantitative measurement of the concentration of glucose in whole blood from fingertip, ventral palm and forearm by diabetic patients or healthcare professionals as an aid in the management of diabetes. It is intended for use outside of the body (in vitro diagnostic use), and not for diagnosis of or screening for diabetes, nor for use on neonates or arterial blood. The alternative site testing (ventral palm and forearm) in this system can only be used during steady-state blood glucose conditions.

Application

Veri-Q MGS-01 and MGS-01B Test Strips are for in vitro diagnostics use only. The Veri-Q MGD-1001 meter is not a substitute for your healthcare professional. Use the Veri-Q MGD-1001 Meter in conjunction with your healthcare program.

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Test Principle

Glucose in the blood sample reacts with glucose oxidase (GOD) on the test strip and a harmless DC Electrical current is produced. This current is measured by the Veri-Q Meter and displayed as your blood glucose result. The strength of these currents changes with the amount of glucose in the blood sample. The Veri-Q Meter automatically interprets this reaction. Test results with the Veri- Q MGD-1001 meter are plasma-equivalent.

The reference instrument used is the YSI 2300 glucose analyzer and is calibrated by YSI 2747 calibrator solution.

Special Features

- Easy to check last 14 days average result.
- Veri-Q MGD-1001 Blood Glucose Monitoring System is designed for home usage.
- Accurate result in 5 seconds with using only 0.5㎕ blood sample.
- Large display screen.
- Store up to 450 test results.
- Blood glucose measurement units are pre-set in mg/dL or mmol/L.
- Use of the wrong unit of measure may cause you to misinterpret your blood glucose level, and may lead to incorrect treatment.

Cautions

Usage and Storage

- Before using your monitoring system, please place it in the environment with the system's normal operating temperature ranging 50~104°F(10~40°C)for about 20minutes.
- Don't allow dust and foreign bodies into test strip slot in order to avoid affecting the system's accuracy.
- Don't decompose, demolish, repair or transform the system at any time.
- Don't put the system near any electromagnetic field (e.g. TV, microwave oven, mobile phone)
- Don't allow the monitoring system to collide with others during usage.
- Keep away from direct sunlight and humid environment for an extended period of time.
- Please use a soft cotton cloth to wipe the system.
- Don't use a corrosive product (e.g. Benzene, Acetone) to wipe the monitoring system.

Cautions regarding the MGS-01 or MGS-01B Test Strips

- Store bottle in a cool and dry place between 8~30℃(46.4~86℉).
- Take test strips out with clean, dry hands for accurate results.
- Use test strips immediately after retrieving from the vial and to keep the test strip vial tightly closed at all time.
- The validity of the test strip is 20 months under seal, and the validity is 3 months open vial.

  Please protect test strips to maintain validity.
- Don't reuse the test strips. The Veri-Q MGS-01 or MGS-01B Test Strips is for one time use only.
- This product is not recommended for pregnant women, newborns or people under severe dehydration.
- Be sure to check the glucose measurement unit on the meter before the test.
- Keep away from direct sunlight and heat.
- Don't refrigerate or freeze test strips.
- Don't use test strips past expiration date.

Veri-Q MGD-1001 Meter is for use only with Veri-Q MGS-01 and MGS-01B Blood Glucose Test Strips.

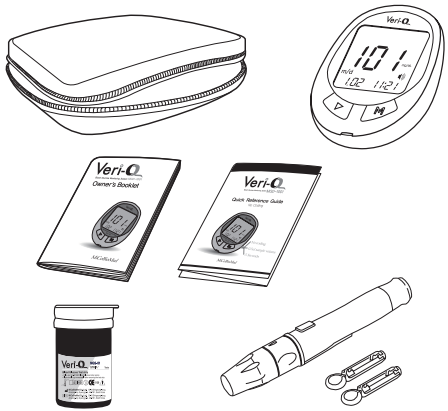
Safety Information

- Inaccurate results may occur for individuals or patients in shock. Inaccurate results may occur for individuals experiencing a hyperglycemic-hyperosmolan state, with or without ketosis. Critically ill patients should not be tested with a blood glucose meter.

- Before using the system, please read this manual carefully.
- The meter and test strips should be handled at the same temperature.
- For accurate results, keep the Veri-Q MGD-1001 blood glucose monitoring system at test place under the operating temperature (50~104℉/10~40℃) for more than 20 minutes before testing.
- The Veri-Q MGD-1001 Blood Glucose Monitoring System shows accurate results between 50~104℉(10~40℃).
- Do not store the meter, test strips, lancing device and lancet in a place where the children can reach easily.
- Please disinfect the instruments and parts for blood collection.
- Do not reuse the test strips.
- The used test strip and lancet should be handled carefully.
- The Veri-Q MGD-1001 Blood Glucose Monitoring System is for testing outside of the body(in vitro diagnostic use).

System Components

Veri-Q MGD-1001 Blood Glucose Monitoring System



Basic components provided:

Veri-Q MGD-1001 Blood Glucose Meter

Veri-Q MGS-01 or MGS-01B Glucose Test Strips (10T), Lancets (10 ea), Lancing device, Check Strip, Pouch, User manual

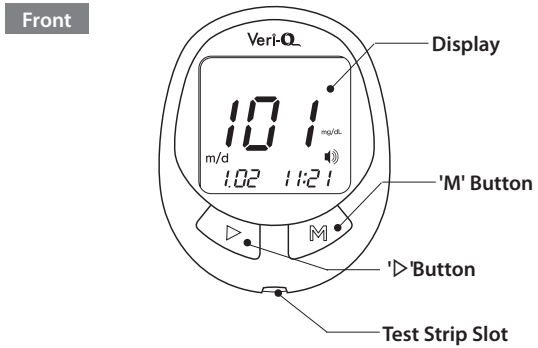
* Some kits do not include test strips and check strip. Test strips and check strip are sold separately.

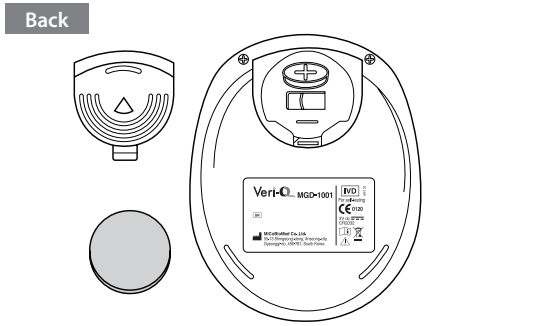
Components sold separately:

MGS-01 or MGS-01B Glucose Test Strips (25T, 50T), Veri-Q Glucose Control Solution, check strip

System Introduction

Veri-Q MGD-1001 Meter





Veri-Q MGS-01 and MGS-01 B Glucose Test Strip

Test Strip Vial

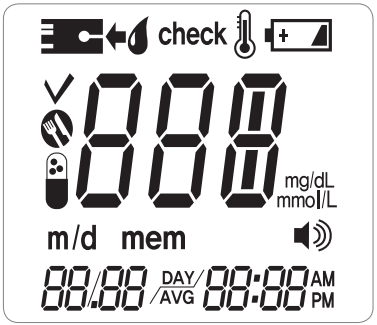
MGS-01 B Test Strip

MGS-01 Test Strip

Use Veri-Q MGS-01 or MGS-01B Test Strip with the Veri-Q MGD-1001 Meter.

- Please check the validity of test strips before using.
- Please write the opening date of the new test strips vial in order to avoid using the expired products.

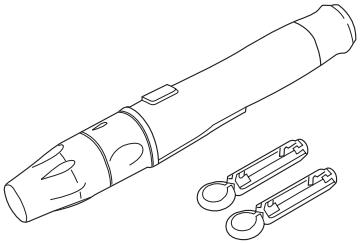
Display

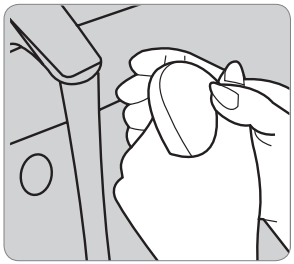


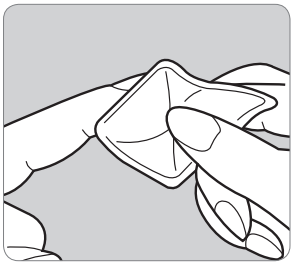
mem	Stored Test Result		Buzzer On
888	Test Results	DAY/AVG	Average Result
mg/dL mmol/L	Unit of Measurement	m/d 88.88	Month/Date
	Temperature Error	88:88 AM PM	Time
	Low Battery Warning	check	Check Strip
	After Meal Mark	✓	Special Result
	After drug		Ready to Test

The Test

Disinfection Before Test

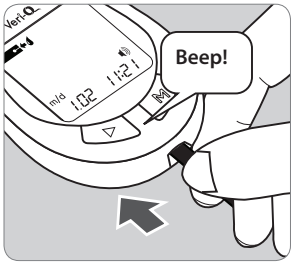






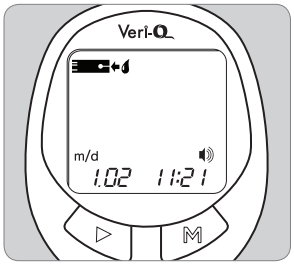
- Before test, please clean hands with soap and water and then dry well.
- You can also use an alcoholic cotton cloth to clean the finger.
- Please wait until the alcohol disappears completely.

Insert Glucose Test Strips



Insert a Test Strip

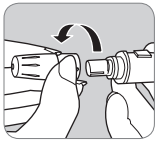
- Insert a test strip into the strip slot. You will hear the sound of beeper.



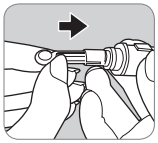
Strip and Blood Symbol

- The display screen will show the strip and blood symbol ( ).
- When the Strip and blood symbol( ) appears, the meter is ready to test for you.
- Please start test according to the common method (please read the details in the page 15).

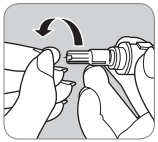
The Method of Blood Collection



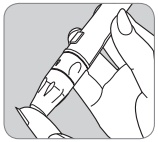
- Unscrew the tip of the lancing device by turning it counter-clockwise.



- While holding the lancet carrier, insert a new sterile lancet into the bottom of lancet carrier.



- Twist off the cap of the lancet.
- Put the tip of the lancing device back on and turn it clockwise.

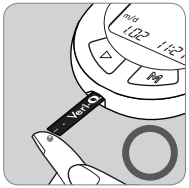


- Get blood sample
- Before testing, wash your hands thoroughly with warm, soapy water. Rinse and dry completely. Hold the lancing device firmly against the side of your finger. Press the release button.

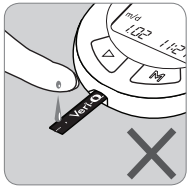
- Never use a lancet that has been used by someone else.
- Do not leave the lancet in the device after use and discard properly.
- If the lancet cap has loosened or fallen, please don't use it.

Add Blood Sample

- Touch the blood drop to the sample channel at the end of the strip.
- When you hear the beeper, you can start the test. After 5 seconds, the result will appear.

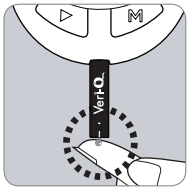


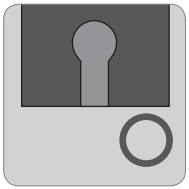
- Touch the blood drop to the sample channel at the end of the strip.



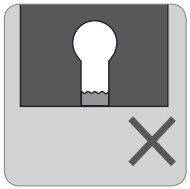
- Don't drop the blood to the strip.

Proper Blood Sample





- The amount of blood sample is sufficient.



- The amount of blood sample is insufficient.

- The sample channel at the end of the strip should be covered with blood. When you hear the sound of beeper, The blood sample is adequate.
- Please don't drop the blood directly on the end of the strip.
- When the blood sample is not sufficient, the display screen will show the message of 'Er 3' (Please refer to error message in this manual.)

Processing the Test Result

- The test result will appear after the meter counts down 5 seconds.
- During countdown, please don't shake it.
- After showing the test result, please take the strip out.

- 5 seconds after drawing blood sample. You can hear the sound of beeper, and the screen will show test result, date and time.
- After taking the strip out, the meter will be turned off automatically.

- If the test result is abnormal, please use a new test strip to test again.
- Also if the test result has a problem, please refer to the Troubleshooting in this manual.

Processing the Test Result

- If you don't want to store test results or control solution test results, please press "**M**" button, You can show the symbol "✓" in the screen.
- After turning off, The meter will not store the test results.

- If you want to mark test results after meal or medicine. please press "▶" button, You can show changed the symbol " " or " " in the screen.
- After turning off, The meter will store the test results.

The Use of Function Buttons

Checking Test Results

- Begin with the meter off. Press '**M**' button, and you will hear the beep and the meter will be turned on.

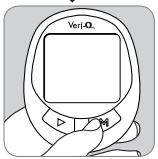
- After 2 seconds, the last 14 days average result will be displayed.

- If you don't make any changes, the meter will be turned off automatically after 3 minutes.

- Press '▶' button one time, the screen will show the most recent test result, date and time.

- Each time '▶' button is pressed, the screen will show the previous test result, date and time.

- Press '▶' button, and the screen will display if there is last test results.



- After completing the check, press '**M**' button , to turn off the meter.

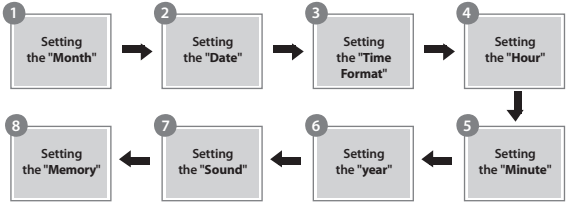
- Press and hold '▶' button for 2 seconds, the speed of test results will be accelerated, and the screen will be changed quickly.

Setting Mode

- Press '**M**' button for 2 seconds, you will hear the beep, the screen will show the whole symbol of system.

- After 1 second, the display screen will show the picture above.

The Setting Sequence of the Date, Time and Checking Units



Setting the "Month"

- When month mode blinks, press and release '▶' Button until correct month appears.
- Press '**M**' button to set and move to date setting mode.

Setting the "Date"

- When date mode blinks, press and release '▶' Button until correct date appears.
- Press '**M**' button to set and move to Time format setting mode.

Setting the "Time Format"

- The meter can be set in 24-hour format default format. When time mode blinks, press '▶' button to shift to AM/PM 12-hour.
- After choosing the time mode, press '**M**' button to set and move to hour setting mode.

Setting the "Hour"

- When hour mode blinks, press and release '▶' Button until correct hour appears.
- Press '**M**' button to set and move to minutes setting mode.

Setting the "Minutes"

- When minute mode blinks, press and release '▶' Button until correct minute appears.
- Press '**M**' button to set and move to year setting mode.

Setting the "Year"

- Entering the year mode, the screen will show the number of year, for example this number stands for the year of 2011. Press and release '▶' button until correct year appears. Press '**M**' button to set and move to sound on/off mode.

Setting the "Sound"

- When sound symbol mode blinks, press and release '▶' Button. You can choose sound on/off
- Press '**M**' button to set and move to memory setting mode.

- Consult your healthcare professional if you have any questions about blood glucose measurement units.
- Use of the wrong glucose measurement unit may cause you to misinterpret your blood glucose level, and incorrect treatment.
- You must make sure about glucose measurement units before the test.

Setting the "Memory"

- When memory mode, The screen will show and blink 'dEL' letters You can press '▶' Button to switch your options 'no' or 'yes' for deleting test results or not.

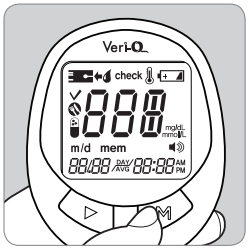
- If you want to remain the stored test results, please choose the symbol 'NO'. And Press '**M**' button again to move to the 'month' setting mode.
- If you want to escape setting mode, press and release 'M' button for 2 seconds or just remain for 3 minutes.

- If you want to delete all test results, press '**M**' button when the screen shows the symbol 'YES'. All the test results will be deleted.

After 3 seconds,the screen will show no test results

- After complete setting, press '**M**' button for 3 seconds, the meter will store the setting and it will be turned off.
- When the number of stored results is more than 450, the oldest stored result will be deleted and the new result will be stored.

Setting Complete



- After complete setting, press 'M' button for 3 seconds, the meter will store the setting and it will be turned off.

- No matter which steps the meter sets, it will store the recent setting and be turned off when you press and hold 'M' button.

Special Results

The mark for control solution test results

- You can use this function when you want to remember the result under control solution test conditions. When the screen displays the test result, press 'M' button after tests, the symbol '✓' mark appears. And then you can take the test strip out, the meter is turned off and the test result is not stored.

The mark for results after meal

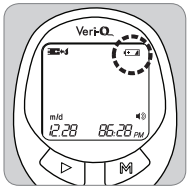
- This mark can be used when you want to distinguish results such as test results after meal. After the test result displayed, press '▶' button once with the test strip inserted, then '🍽' appears. And you can take the test strip out, the meter is turned off and the test result is stored automatically.

The mark for results after medicine

- This mark can be used when you want to distinguish results such as test results after medicine. After the test result displayed, press '▶' button twice with the test strip inserted, then '💊' appears. And you can take the test strip out, the meter is turned off and the test result is stored automatically.

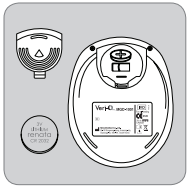
Replacing Battery

- Veri-Q Blood Glucose Meter uses a 3V Lithium Battery (CR2032).
- This battery lasts for 1000 tests.

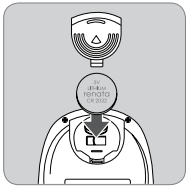


- When the energy of battery is not enough, the screen shows and blinks the battery mark (). It indicates that the energy left could operate testing about 50 times more. At this time, we suggest that you should replace the battery. If you replace the battery while the meter is on, the stored results will remain, but the date, time need to be reset.

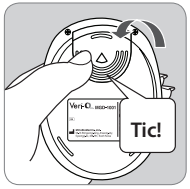
- Please turn the meter off before replacing the battery.
- Open the battery lid.



- Take out the old battery.



- Put the new battery (CR2032) into the battery slot, and make sure the battery shows positive sign facing upward.



- Turn the battery lid off. Press the battery lid down until you hear sound "Tic"

- If you replace the battery while the meter is on, the time need to be reset.
- The meter can't be turned on when the battery mode doesn't match the meter or the battery isn't installed correctly.

Cleaning Veri-Q Blood Glucose Meter

Caring for your Veri-Q Blood Glucose Meter is easy-just keep it free of dust. If you need to clean or disinfect it, please follow these guidelines carefully to help you get the best performance possible.

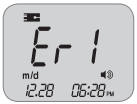
- Make sure the meter is off.
- Gently wipe the meter's surface with a soft cloth slightly dampened with one of these cleaning solutions:
  - Super sani-cloth
  - 70% isopropyl alcohol
  - Mild dishwashing liquid mixed with water.
  - 10% household bleach solution(1 part bleach plus 9 parts water) made the same day.
- Make sure you squeeze off excess liquid from the cloth before you wipe the meter's surface.

⚠

- Do not spray any cleaning solution directly onto the meter.
- Do not put the meter under water or liquid.
- Do not pour liquid into the meter.

Troubleshooting

Error messages

Messages	Descriptions	Solutions
	Test strip is used or damaged.	Replace a new test strip.
	Temperature is too hot or too cold for the system to work properly.	The operating temperature should be 50~104°F (10~40°C). Please use system after about 20 minutes.
	The blood sample is not filled enough for measurement because of abnormally high viscosity or insufficient volume.	Repeat test with a new test strip.

Hi, Lo Messages

Messages	Descriptions	Solutions
	When the test result is higher than 600 mg/dL(33.3 mmol/L), the screen will show the 'Hi' mark it indicates that the value of your blood glucose is too high.	Replace the test strip. If 'Hi' mark appears again, please call your healthcare professional immediately.
	When the test result is lower than 20 mg/dL(1.1 mmol/L), the screen will show the 'Lo' mark. It indicates that the value of your blood glucose is too low.	Replace a new test strip. If 'Lo' mark appears again, Please call your healthcare professional immediately.

- In the event of a problem with the meter or an error message, please contact the distributor or manufacturer
- The test range of Veri-Q Blood Glucose Meter is 20~600mg/dL (1.1~33.3 mmol/L)

Causes	Solutions
The thermometer mark (🌡) appears on the screen.	■ Put the meter and test strip into the environment of temperature 50~104°F(10~40°C). You should use it after about 20 minutes. ■ If the thermometer mark always appears on the screen, please contact the distributor or manufacturer.
The meter does not work after inserting test strip.	■ Make sure test strip inserts into the strip slot completely. ■ Make sure the battery shows positive sign facing upward. ■ Replace the battery.

Causes	Solutions
The meter does not work after the blood is applied.	■ Make sure test strip inserted into the test strip slot completely. ■ Make sure the blood applied to the test strip correctly. ■ Make sure the test strip inserted direction is correct and repeat test.
Test result is abnormal.	■ Check whether the test strip has foreign bodies adhered or exposed for long time. ■ Check whether the test strip is used. ■ Check whether the test strip has become invalid. ■ Check whether the test strip vial opened date has passed more than 3 months.

Warranty

The makers guarantee that the Veri-Q MGD-1001 Blood Glucose Meter shall be free of defects in material and workmanship for a period of five years.

This guarantee is valid from the date of purchase. The guarantee extends only to the original purchaser and is not transferable.

The warranty ceases to apply under the following conditions:

- The meter is damaged as a result of incorrect use.
- The meter is damaged as a result of natural disasters (e.g. typhoon, earthquake and so on)
- The meter is damaged as a result of demolition.
- The meter is damaged because you use products which are not compatible with our products.

Technical Specification

Product Name	Veri-Q Blood Glucose Monitoring System
Meter type	MGD-1001
Blood Sample	Fresh capillary whole blood
Blood Volume	0.5 μl
Test Strip Type	Veri-Q MGS-01 and MGS-01B
Measuring Range	20~600 mg/dL (1.1 ~ 33.3 mmol/L)
Measuring Time	5 seconds
Power	One 3V Lithium Battery type (CR2032)
Battery Life	Approximately more than 1000 tests
Memory Capacity	450 test results (include date and time)
Operating Temp.	50 ~ 104°F (10~40°C)
Operating Humidity	10 ~ 90 %RH
Storage Temp.	46 ~ 86°F (8~30°C)
Dimensions	57 X 70 X 17 (mm)
Weight	36g (with battery)

Diagnostic System

Control solution test (Veri-Q control solution is a optional product)

The control solution test confirms that your meter and test strips are working correctly. A control solution test is similar to a blood glucose test. Except using Veri-Q control solution and not a blood sample.

Users should periodically compare the test system to another test system known to be well maintained and monitored by a healthcare provider.

You should run a control solution test;

- When you first get your Veri-Q MGD-1001 Meter.
- When you open and begin using a new test strip vial.
- If you feel your test results are not accurate, or if your test results are not consistent with how you feel.
- If you leave the test strip vial cap open for any length of time.

- The Veri-Q Control solution range is printed on the test strip vial.
- Check the expiration date on the control solution vial. Do not use control solution past the expiration date.

Check Strip test

The Check Strip Test confirms that your meter is working correctly. The check strip only tests the function of the meter and not the ability of test strip to render a result or the accuracy of the system as a whole. To test the entire system, please rely on the results from testing a control solution.

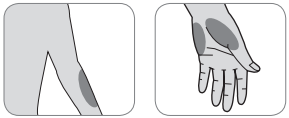
- Step 1. Begin with the meter off condition, insert the Check Strip to the meter's test strip slot.
- Step 2. If the meter doesn't display 'YES' message after inserting check strip, please contact the distributor or manufacturer
- Excessive use of check strip may cause the damage of meter's strip slot.
- Please use the check strip only when you think the meter is working improperly.

Important information
Alternative Site Testing (AST)

Contact your healthcare professional before you begin using any one of these alternative sites to test your blood glucose.

- Alternative site results may be different from fingertip results when glucose levels are changing rapidly (e.g., after a meal, after taking insulin, or during or after exercise).
- Do not rely on test results at an alternative sampling site. But use samples taken from the fingertip, if any of the following applies:
- You think your blood sugar is low
- You are not aware of symptoms when you become hypoglycemic
- The site results are not consistent with the way you feel
- After a meal
- After exercise
- During illness
- During times of stress

Alternative Test Site



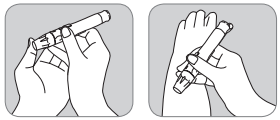
Forearm Ventral palm

- Use alternative site testing only two hours or more after taking insulin, two hours or more after a meal, two hours or more after exercise.
- Do not use alternative site testing if you are pregnant, or if you are aware that your glucose level is not as stable as usual, or if you think you have hypoglycemia (low blood sugar) or hyperglycemia (high blood sugar), or at times when you think your blood glucose may be rising or falling rapidly.
- Do not use alternative site testing if your alternative site testing results do not match the way you feel.

Alternative Test Site sampling

Step1. Choose the Puncture site

Select a soft, fleshy area on your forearm or ventral palm those are clean and dry, away from bone, and free of visible veins and hair



Step2. Massage the Area

To increase blood flow to the puncture site, massage the area gently. For individuals who experience difficulty in getting sufficient blood for a test, rubbing the area more vigorously or applying heat briefly may be helpful.

Step3. Position the sampler

Press and hold the sampler against the arm for a few seconds. Press the release button.

Step4. Allow blood drop to form

Continue holding the sampler against the skin for a few seconds until the blood drop forms. Allow enough blood to form under the cap until you have a blood sample that is sufficient to fill the confirmation window of the test strip. If you must massage the area to obtain more blood, do not squeeze the site excessively.

Symbols

Note

Caution

Manufacturer

Batch code

Temperature Limitation

Catalogue Number

Used by

In vitro Diagnostic Medical Device

Consult instruction for use

3V CR2032 Battery

Do not reuse

WEEE Directive

CE Mark reg. IVDD 98/79/EC

Authorized Representative in the European Community

Serial Number

EMC Test Results

- This equipment complies with EN 61326-:2006 Class B requirements and the emissions of the energy used are low and not likely to cause interference in nearby electronic equipment.
- The equipment is tested for immunity to electrostatic discharge at test level ±2kV, ±4kV and ±8kV of air discharge.
- The equipment is tested for immunity to radio frequency interference at the frequency 80MHz to 2.7GHz and test levels 3V/m.

Disposal of Used Electrical & Electronic Equipment

The meaning of the symbol on the product, its accessory or packaging indicates that this product shall not be treated as household waste. Please, dispose of this equipment at your applicable collection point for the recycling of electrical & electronic equipments waste. In the European Union and Other European countries which there are separate collection systems for used electrical and electronic product. By ensuring the correct disposal of this product, you will help prevent potentially hazardous to the environment and to human health, which could otherwise be caused by unsuitable waste handling of this product. The recycling of materials will help conserve natural resources. Therefore please do not dispose of your old electrical and electronic equipment with your household waste. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.